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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10.070.351	10/19/2001	Wieslaw Bicz		7073

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EXAMINER DOUGHERTY, THOMAS M

ART UNIT 2834	PAPER NUMBER
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DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,351

Applicant(s)

BICZ, WIESLAW

Examiner

Thomas M. Dougherty

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 presents no antecedent basis for "the base" in line 9 of the claim. The claim also notes "the one electrode" and "the other", neither of which has proper antecedent basis. Additionally, it is not known what the width refers to. The "width" wasn't found in the disclosure, only a, b and h are the disclosed dimensions. Given that the device in claim 2 can be round or polygonal or a cone or a pyramid in shape, what can "width" possibly refer to? Finally, in claim 1 the description of the device: "in longitudinal sections has a T-shape", is indefinite, what longitudinal sections are referred to here? In claim 3, the proportions are presented as $a/b/h$ which may be taken to be equivalent to $(ah)/b$. The figure does not show such dimensions, at least by sight such that $(ah)/b$ ranges from $1/4$ to $6/10$. Alternatively, if $a/b/h$ is a ratio, then three values are required to explain it. Note that this is also indefinite in the disclosure. Note also that there is no "a" dimension in figure 1. "d" is shown instead. This requires correction. In claim 4, an additional polarization is noted. What part is radially polarized? Is it the base? The rod? In claim 5 the "although" clause is somewhat confusing. Is this an anecdote to the structure or is it intended to be a definite structural feature? Additionally, the language in claim 6 "or the like" is indefinite because the claim does not particularly point out and distinctly claim the subject matter

which the applicant regards as his invention. Under *In re Hammack*, 166 USPQ 204 (CCPA 1970) and *In re Moore*, 169 USPQ 236 (CCPA 1971), claims must be analyzed to determine their metes and bounds so that it is clear from the claim language what subject matter the claims encompass. This analysis must be performed in light of the applicable prior art and the disclosure. The definiteness of the claims is important to allow others who wish to enter the market place to ascertain the boundaries of protection that are provided by the claims. *Ex parte Kristensen*, 10 USPQ 2d 1701, 1703 (PTO Bd. Pat. App. & Intf.) Use of a narrower range within a broader range in the same claim renders the claim indefinite since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. One could not tell from such a claim if the narrower range or limitation is a restriction or limitation on the broader range or limitation. "or the like" is an example of such language. *Ex parte Caldwell*, 1906 CD 58 (Commr Pats 1905) "coke, brick or like material" was held to be indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 5, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Bicz (WO 97/16260 which is also PCT/EP96/04754). Bicz shows

(figs. 2, 5) a pulse (see Schallimpuls at p. 4, I. 17) sound transducer for the ultrasonic range (see title) for use either as a transmitter or as a receiver (see ABSTRACT) with an elementary block composed of piezoelectric material, characterized in that, the height of the elementary block, as this description is best understood, composed of piezoelectric material is greater than its width (for example, an individual block is higher than its width) and the block at the output end (2) for the pulse has a shoulder so formed thereon that a smooth output surface is formed for the sound wave, and in longitudinal sections has a T-shape as that is best understood, whereby the base polarization runs perpendicularly to the output surface (p. 6, II. 19-23) and the one electrode (14) is provided on the output surface (2) while the other (15) runs above the shoulder on the block. See the Abstract where it notes that "the front and rear surfaces of the active transducer element are covered with electrodes" and discussion of fig. 5 at p. 7, second line from the bottom to p. 8, line 4.

The block is configured as a round or polygonal column, cone or **pyramid** and the shoulder is matched thereto correspondingly. In other words, the pyramids shown each have a shoulder portion.

The transducer (1) is assembled from a plurality of cells as shown in fig. 5, whereby the cells have electrodes (15) around the columns or the like structures (as that term is best understood), although the totality of the cells has an electrode (14) on the total output surface for the pulses (as best understood, this refers to the bottom surface, opposite the side with the pyramids).

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The remaining prior art reads on at least some aspects of the claimed invention.

Claims 3 and 4 are so indefinite that art cannot be applied against them at this time. When they are made definite, a consideration of their relationship to the prior art may be made.

Direct inquiry concerning this action to Examiner Dougherty at (703) 308-1628.

tmd
tmd

May 20, 2003

Thomas M. Dougherty

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